



IPW

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q85483

Yoshiaki KOBAYASHI, et al.

Appln. No.: 10/520,424

Group Art Unit: Not Yet Assigned

Confirmation No.: Not Yet Assigned

Examiner: Not Yet Assigned

Filed: January 7, 2005

For: SWITCH INTEGRATED TYPE HOUSING AND ELECTRONIC EQUIPMENT  
HAVING THE SAME

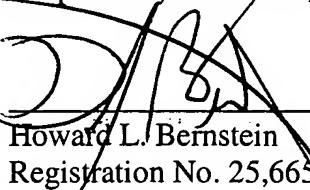
**SUBMISSION OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(IPER)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

For the Examiner's convenience, enclosed herewith is a copy of the English translation of the International Preliminary Examination Report (IPER). It is assumed that copies of the cited references as required by §371(c) will be supplied directly by the International Bureau, but if further copies are needed, the undersigned will undertake to provide them upon request.

Respectfully submitted,

  
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WASHINGTON OFFICE  
23373  
CUSTOMER NUMBER

Date: July 18, 2005

From the INTERNATIONAL BUREAU

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT  
(PCT Rule 72.2)

To:

KUDOH, Minoru  
KADOYA BLDG. 6F  
24-10, Minamiooi 6-chome  
Shinagawa-ku, Tokyo 140-0013  
JAPON



|  |   |
|--|---|
| Date of mailing (day/month/year)<br>31 March 2005 (31.03.2005) |   |
| Applicant's or agent's file reference<br>03PCFP895             | <b>IMPORTANT NOTIFICATION</b>   |
| International application No.<br>PCT/JP2003/008575             | International filing date (day/month/year)<br>07 July 2003 (07.07.2003) |
| Applicant<br>NEC CORPORATION et al                             |   |

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

**2. Transmittal of the copy of the translation to the elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

CN, EP, KR

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

US

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

**It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.**

|   |   |
|---|---|
| The International Bureau of WIPO<br>34, chemin des Colombettes<br>1211 Geneva 20, Switzerland | Authorized officer<br><br>Masashi Honda |
| Facsimile No.+41 22 740 14 35   | Facsimile No.+41 22 338 70 10           |

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

|   |   |  |
|---|---|--|
| Applicant's or agent's file reference<br>03PCFP895  | FOR FURTHER ACTION  | SeeNotificationofTransmittalofInternational Preliminary Examination Report (Form PCT/IPEA/416) |
| International application No.<br>PCT/JP03/08575   | International filing date (day/month/year)<br>07 July 2003 (07.07.03) | Priority date (day/month/year)<br>08 July 2002 (08.07.02)                                      |
| International Patent Classification (IPC) or national classification and IPC<br>H01H 13/48, 13/04, 13/70, G06F 1/16, 15/02, H04M 1/02 |   |  |
| Applicant<br>NEC CORPORATION  |   |  |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

|   |  |
|---|--|
| Date of submission of the demand<br>07 July 2003 (07.07.03) | Date of completion of this report<br>05 November 2003 (05.11.2003) |
| Name and mailing address of the IPEA/JP                     | Authorized officer   |
| Facsimile No.   | Telephone No.  |

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP03/08575

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

the international application as originally filed  
 the description:

pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the claims:

pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19)  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the drawings:

pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the sequence listing part of the description:

pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  
 the language of publication of the international application (under Rule 48.3(b)).  
 the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in written form.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority in written form.  
 furnished subsequently to this Authority in computer readable form.  
 The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
 The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4.  The amendments have resulted in the cancellation of:

the description, pages \_\_\_\_\_  
 the claims, Nos. \_\_\_\_\_  
 the drawings, sheets/fig \_\_\_\_\_

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/JP 03/08575

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

|                               |        |      |     |
|-------------------------------|--------|------|-----|
| Novelty (N)                   | Claims | 1-21 | YES |
|                               | Claims |      | NO  |
| Inventive step (IS)           | Claims |      | YES |
|                               | Claims | 1-21 | NO  |
| Industrial applicability (IA) | Claims | 1-21 | YES |
|                               | Claims |      | NO  |

## 2. Citations and explanations

Document 1: JP 1-221824 A (Matsushita Electric Industrial Co., Ltd.), 5 September 1989

Document 2: JP 8-148056 A (Mitsumi Electric Co., Ltd.), 7 June 1996

Document 3: Microfilm of the specification and drawings annexed to the Japanese Utility Model Application No. 23590/1981 (Laid-open No. 136134/1982) (Hoshiden Electronic Co., Ltd.), 25 August 1982

Document 4: CD-ROM of the specification and drawings annexed to the Japanese Utility Model Application No. 63734/1992 (Laid-open No. 28952/1994) (Japan Aviation Electronic Industry Ltd.), 15 April 1994

Document 5: JP 7-154080 A (Ricoh Co., Ltd.), 16 June 1995

Document 6: Microfilm of the specification and drawings annexed to the Japanese Utility Model Application No. 70564/1985 (Laid-open No. 188225/1986) (Alps Electric Co., Ltd.), 22 November 1986

Document 7: JP 7-65666 A (Oki Electric Industry Co., Ltd.), 10 March 1995

Document 8: JP 2001-216866 A (Fuji Denshi Kogyo Kabushiki Kaisha), 10 August 2001

Document 9: Microfilm of the specification and drawings annexed to the Japanese Utility Model Application No. 74476/1985 (Laid-open No. 189535/1986) (Toshiba Corporation), 26 November 1986

Document 10: CD-ROM of the specification and drawings annexed to the Japanese Utility Model Application No. 3981/1993 (Laid-open No. 58537/1994) (Tamura Electric Works, Ltd.), 12 August 1994

The inventions set forth in claims 1, 2, 4 to 8, 20 and 21 do not involve an inventive step in the light of document 1 (entire text), document 9 (page 2, line 3 to page 3, line 3) and document 10 (page 4, line 28 to page 7, line 3) cited in the international search report. It would be easy for a person skilled in the art to provide a plurality of the switches set forth in document 1. In addition, it would be easy for a person skilled in the art to align the center of the conductor set forth in document 1 with the position of the center axis of the protrusion. Moreover, it would be easy for a person skilled in the art to constitute the substrate set forth in document 1 as a casing body, as described in documents 9 and 10.

The invention set forth in claim 3 does not involve an inventive step in the light of document 1 and document 4 (page 6, line 28 to page 9, line 19) and document 5 (page 3, right column, line 11 to page 4, left column, line 48) cited in the international search report. It would be easy for a person skilled in the art to provide a top plate covering the surrounds of the switch buttons as described in 4 and 5, to the invention set forth in document 1.

The invention set forth in claims 9 to 11 and 13 does not involve an inventive step in the light of document 1 and document 2 (page 3, left column, lines 24 to 41) cited in the international search report. It would be easy for a person skilled in the art to form the first and second electrodes set forth in document 1 on a switch button sheet, as described in document 2.

The invention set forth in claim 12 does not involve an inventive step in the light of documents 1 and 2 and document 3 (page 3, line 20 to page 9, line 1) cited in the international search report. It would be easy for a person skilled in the art to embed the first and second wiring patterns set forth in document 1 in a button sheet, as described in document 3.

The invention set forth in claim 14 does not involve an inventive step in the light of documents 1, 2, 4 and 5. It would be easy for a person skilled in the art to provide a top plate in such a manner as to cover the punched out section set forth in document 1, as described in documents 4 and 5.

The invention set forth in claims 15 to 18 does not involve an inventive step in the light of document 1, document 6 (page 5, line 18 to page 9, line 14) and document 7 (page 3, right column, line 16 to page 4, left column, line 17) cited in the international search report. It would be easy for a person skilled in the art to provide the first and second electrodes set forth in document 1 to a substrate, as described in document 6, and to have the first and second electrodes set forth in document 1 pass through the substrate, as described in document 7.

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The invention set forth in claim 19 does not involve an inventive step in the light of documents 1, 6 and 7 and document 8 (page 2, right column, line 31 to page 3, left column, line 7) cited in the international search report. It would be easy for a person skilled in the art to apply protrusions which pass through holes in the cover sheet described in document 8, to the conductor set forth in document 1.